

**SYSTEM AND METHOD FOR DOWNLOADING APPLICATION  
COMPONENTS TO A CHIPCARD**

**Abstract of the Disclosure**

5           The present invention describes a method for  
downloading application components, so-called on-card  
application components, from a server via a client to a  
chipcard, wherein the server and the client communicate with  
each other via a distributed system, in particular an  
10 Intranet or the Internet. The advantages of the present  
invention lie in the fact that downloading of the  
application components is divided into two stages: The first  
stage occurs on the server only, and ensures that not every  
command to download the application component is sent  
15 individually over the network. This is effected by means of  
a broadband-optimized protocol which bundles the individual  
commands to download the application component into a  
command sequence and sends it as a complete data packet over  
the network. This reduces the time required for downloading  
20 application components over the network. Each command within  
the command sequence is assigned a digital signature and,  
where appropriate, encrypted. This ensures that only  
authenticated commands are accepted by the chipcard. In this  
way this invention meets security requirements for the  
25 transfer of data via distributed systems, in particular over  
the Internet. The second stage occurs between the client  
and the chipcard, and ensures that the data packets are  
unpacked and sent individually to the chipcard. All  
security-relevant keys and certificates are stored on the  
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